

Name: **AYTHA RAMESHKUMAR**

Designation: Associate Professor

Department: Electronics and Communication Engineering

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Experience (in years): Teaching: 20 yrs Research: 00

Others (Industry): 4 yrs



1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	B.E.	1991	Electronics
2	M. Tech.	2006	VLSI Design
3	Ph.D.	Thesis Submitted	VLSI Design

2. Teaching and Learning:

2.1 Teaching Interests:

- VLSI Design, IOT, Micro controllers and its Applications, Microprocessors, CPLD & FPGA Architectures & Applications, Wireless communication and embedded systems.

2.2 Novel Teaching & Learning Techniques adopted: PPTs, Videos, Group Discussions, POGIL, Chalk and Talk, WIT & WIL etc.

2.3 Involvement in curriculum updating / Design:

- Academic Committee Member for Dept. of ECE for Curriculum design.
VNRLab protocol for Microprocessor & Microcontrollers Lab, Embedded Systems Lab.

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Sports, Listening Music

3.2. CCA/ECA Organized: Convergence-2k17, Convergence-2k16, Convergence-2k15, Scintilla schunz

3.3. CCA/ECA participated:

- Project Evaluation committee member for M.Tech (Embedded Systems).
- Department Entrepreneurship cell in-charge.
- Student IETE Society in-charge

3.4. Counseling and Mentoring Activity:

- Counselor and mentor for B.Tech Students.

Committees involved in: Department level:

- Academic Committee Member
- Project Evaluation Committee Member
- Technical Seminar Evaluation Member Institute Level:
- In-Charge for Telecom for college
- Student IETE society in-charge
- Department Entrepreneurship cell in-charge

4. Conference / Workshop / Seminar / Guest Lectures:

4.1 Conducted: 16

- National conference VelaSiEm-2k7 at VNRVJIET in 2007
- Short term intensive course on Embedded Architecture & Applications at VNRVJIET, Hyderabad on 12-14, February 2009
- Workshop on IOTs & Its Applications at VNRVJIET in 2016 on 12-14, February 2016.
- Member of the Reception, Decoration, Stage Management committee and Hospitality
- Organized 7th IEEE International Advance Computing Conference (IACC2017) at VNRVJIET, Hyderabad on 5th -07th January 2017.

4.2 Attended: ICEEOT- 2016, IACC – 2017, E&ICT IITG, NITW, NITP, IITB, KU

- A week FDP on “LaTeX & Technical Report Writing” from 25th to 30th May 2020.

- A Five Day FDP on “Establishing Research Beyond Horizon” from 26th to 30th May 2020.
- Webinar on “Relax, Refresh, Rejuvenate” on 30th April 2020.
- Webinar on “Latex – A Scientific Documenting Tool” on 21st May 2020.
- One week NIT & JNTUH “ 5G Technologies” by JNTUH , Hyderabad ,18th Dec-24th Dec 2017.
- One week FDP on “Integrated circuit and System Design Using CAD Tools” by VNRVJIET, Hyderabad from 12th -17th June 2017.
 - Two-week ISTE STTP “CMOS Mixed Signal and RF VLSI Design” by IIT Kharagpur at VNRVJIET, Hyderabad,30th January 2017 to 04th February2017.
- IEEE International Conference on Electrical, Electronics and Optimization Techniques, at DMI College of Engineering, Chennai, 3-5th, March2016.
- FDP on “Trends in wireless Technologies and Evolution of Simulation tools, at VNRVJIET, 11- 23, May2015.
- TEQIP- II sponsored training program on “VLSI Design Flow Using CAD Tools and Hardware Implementation” at VNRVJIET, Hyderabad, 27thJuly-07th August 2015.
- 7th IEEE International Conference on Technology for Education at NIT, Warangal,10-12, December 2015.
- “ Three Day Workshop on Outcome Based Accreditation” by NBA Nodal Centre, JNTU Hyderabad, 15th-17th February2014.
- Workshop on ASIC Design Flow Using Industry Standard EDA Tools organized by VNRVJIET on 21st-27th June 2013.
- Workshop on Wireless Sensor Nodes by VNRVJIET on 19 th-20th June2013.
- Seminar on Research Publications and Documentation by VNRVJIET, Hyderabad on 04th May2013.
- Three day International conference on REIMAGINE STEM at VNRVJIET Hyderabad.
- Workshop on “Low Power VLSI Design Methodologies” by SYNOPSYS at CVED JNTUH, Hyderabad, INDIA.
- Work shop on “VLSI Design Methodologies” by SYNOPSYS at Padmasree B.V.Raju Institute of Technology, Narsapur, INDIA, 6th -7th March2009.

5.Academic Contribution and Research &Consultancy:

5.1.Invited Lectures:

- Delivered Guest lecture on overview of Internet of things in VNRVJIET
- Delivered Guest Lecture on VLSI Design at Lords Institute of Engineering & Technology, Hyderabad –November 2014
- Delivered Lecture in FDP on Recent trends in Embedded Systems design in VNRVJIET in November2013.

5.2. Articles/Chapters published in Books:Nil

5.3. Books published as single author or as editor:Nil

5.4. ProjectsGuided:

a)UG:20 b)PG:20

5.5. Research Interests: VLSI design, Data Transmission Protocols and ProcessorArchitectures and EmbeddedSystems

5.6. Ph.D students:Nil

a)Enrolled:Nil

b)Submitted:Nil

c) Awarded:Nil

5.7. Papers published in reviewedJournals:

S.No	Title of the Paper	Journal Name Vol.No.PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Hierarchical Matched Filter Implementation on FPGA for WCDMA Systems	Journal of Communication and Computer, USA.August 2011, Vol8, PP 686-692.	ISSN No.1548-7709	2.69	International
2	Emotion Recognition from Speech Using Embedded Board OMAP 3530	IJARET, India, October 2013, vol.1, issue ix, October 2013,38-44PP.	ISSN 2320-6802	2.375	International
3	Implementation of High efficiency High throughput and low power design for high order filter using distributed architecture Implementation of High efficiency High throughput and low power design for high order filter using distributed architecture	International journal for Innovative Engineering and Management Research, vol.6,issue 13, December 2017,172-180pp	ISSN No. 2456-5083	7.8	International
4	Implementation of Primary Synchronization signal Detection in LTE	International journal of Advance Engineering and Research Development , Volume 5, Issue 04, April 2018	ISSN : 2348-6406	5.71	International
5	Implementation of Secondary Synchronization in LTE	IJCRT, 2018	ISSN: 2320-2882	5.97	International
6	Implementation of synchronization for 5G NR system	Advanced Science Letters,Vol.26, No. 06,129-135pp.	E-ISSN: 1936-7317	6.224	International
7	Implementation of 5G NR Primary and Secondary Synchronization	Turkish Journal of Computer and Mathematics Education, Vol.12, No.8, 2021,3153-3161P.P.	E-ISSN: 1309-4653	0.32	International SCOPUS
8	FPGA Implementation of 5G NR Primary and Secondary Synchronization	Computers, Materials & Continua,Tech Science Press, vol.73, no.1,2022, 1585-1600pp.	DOI: 10.32604/cm.c.2022.021573	3.7	SCI

5.8. Papers presented at National / International conferences:

S.No	Title of the Paper	of the Conference/ Seminars	National/ International	Period
1	Performance Evaluation For Digital Matched Filters	National conference on VLSI & Embedded Systems	National	June 2009
2	Hybrid Form Hierarchical Matched Filter on Field Programmable Gate Arrays based on WCDMA	International Conference on Systemics, Cybernetics, and Informatics (ICSCI-2010)	International	January 2010.
3	Implementation of Hierarchical Matched Filter on FPGA for WCDMA Systems	International Conference on Advances in Information, Communication Technology and VLSI Design (ICAICV-2010)	International	August 2010
4	Implementation of Secondary Synchronization Detector for WCDMA Systems	IEEE International Conference on Electrical, Electronics and Optimization Techniques,	International	March 2016.
5	The Fastest Possible Solution to the Weighted Water – Filling Problems	7 th IEEE International Advanced Computing Conference (IACC 2017)	International	January 2017
6	Energy Efficient Adiabatic Logic Against Power Analysis Attacks for IOT Applications	2021 Fourth International Conference on Microelectronics, Signals & Systems (ICMSS)	International	18-19 November 2021
7	FPGA Realization of 5G NR Primary Synchronization Signal Detector using Systolic FIR Filter	3rd International Conference on Machine Learning, Image Processing, Network Security and Data Sciences, NIT Raipur.	International	11th-12th December 2021

5.9. Sponsored research Projects: Nil

5.10 Consultancy Projects: Nil

6.Awards / Honors received:

Best paper award in International Conference on Systemics, Cybernetics, and Informatics (ICSCI-2010), Pentagram Research Centre, Hyderabad, January 2010.

7. Motto: Work is Worship & Efficiency is Divine Vision, Work & Efficiency SecureLife